Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

DUPLICATE

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: C.S.V. Oil Exploration Co

3. ADDRESS OF OPERATOR: 2005 South 300 West, Salt Lake City, Utah 84115

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1,845' FSL; 2,026' FWL, Sec, 31
At proposed prod. zone:

5. LEASE DESIGNATION AND SERIAL NO.: U-22921
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Federal
9. WELL NO.: 1-31
10. FIELD AND POOL, OR WILDCAT: San Arroyo
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 31, T.16S., R26E SLM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx. 17½ miles Northwest of Mack, Colorado

12. COUNTY OR PARISH: Grand
13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 525' / ~~4,515'~~
16. NO. OF ACRES IN LEASE: 320
17. NO. OF ACRES ASSIGNED TO THIS WELL:
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 4,515'
19. PROPOSED DEPTH: 4,350'
20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5,526.5' GR
22. APPROX. DATE WORK WILL START*: November 15, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	8-5/8"	32#	450'	200 sks

1. The above proposed well will be spudded in the Mancos Shale.
2. Estimated geologic Fm tops: Dakota 3,830'; Cedar Mt. 3,958'
3. Oil may be found in the lower Mancos Shale; gas in the Dakota Fm and gas or oil in the Cedar Mt. Fm.
4. About 450' of new or used 8-5/8", J-55, 32# surface pipe will be set and cemented to shut off any water. Production casing, if required,
5. will be hung from the surface pipe. Either 4½" or 5½" (new or used) J-55, 12#, production casing will be used.
5. Pressure Control Dvice: See attatched diagram.
6. Air will be used as the circulating media.
7. It is proposed that a float valve (600#) will be run in the bottom drill collar. A drill string float valve (3000#) and a kelly hose shut-off valve will be used.
8. Possible productive zones will be open-hole tested. An induction electric log will be run. (OVER)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED [signature] TITLE _____ DATE August 14, 1978

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY [signature] FOR E. W. GUYNN TITLE DISTRICT ENGINEER DATE OCT 20 1980

CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

ut 0+G

*See Instructions On Reverse Side

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

9. No abnormal temperatures, pressures, or potential hazards are expected.

10. Federal Oil & Gas Lease U-22921 will expire Nov. 30, 1978; therefore, it is necessary to drill the above well prior to Nov. 30, 1978. Planned date will be Nov. 15, 1978. About 15 days will be required to drill the well.

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

* GPO 782-931

BLOWOUT PREVENTERS
ROTATING

RUCKER Shaffer

ROTATING BLOWOUT PREVENTERS

The Shaffer Rotating Blowout Preventer is essentially a rotating wellhead which maintains a constant seal around all of the rotating elements in the drill string except such large diameter pieces as the bit or reamer. This seal is maintained when going in, coming out or holding in a static position.

It seals off around any shape of kelly* and will also seal on any type of drill pipe, whether flush joint, upset or coupled. No special operations are required for handling the pipe. As the various elements of the drill string are raised or lowered, the "Stripper Rubber" changes shape to conform to the O.D. of these elements. In this way the hole is closed at all times. A flanged outlet below the Stripper Rubber allows the pressure to be directed out of the side.

The Rotating Blowout Preventer is ideal for use wherever there is:

1. **Circulating with air or gas.**
2. **Drilling under pressure.**
3. **Drilling with reverse circulation.**
4. **Drilling in areas susceptible to blowouts.**

*Except fluted

INSTRUCTIONS FOR ORDERING

When ordering Shaffer Combination Rotating Blowout Preventers and Strippers, specify size, API bottom flange connection, size of outlet and whether flanged or screwed, size and shape of kelly, size of drill pipe and drill collars.

RECOMMENDED SPARE PARTS

When ordering parts, give size and serial number of Rotating Preventer and if possible show purchase order number under which original equipment was obtained.

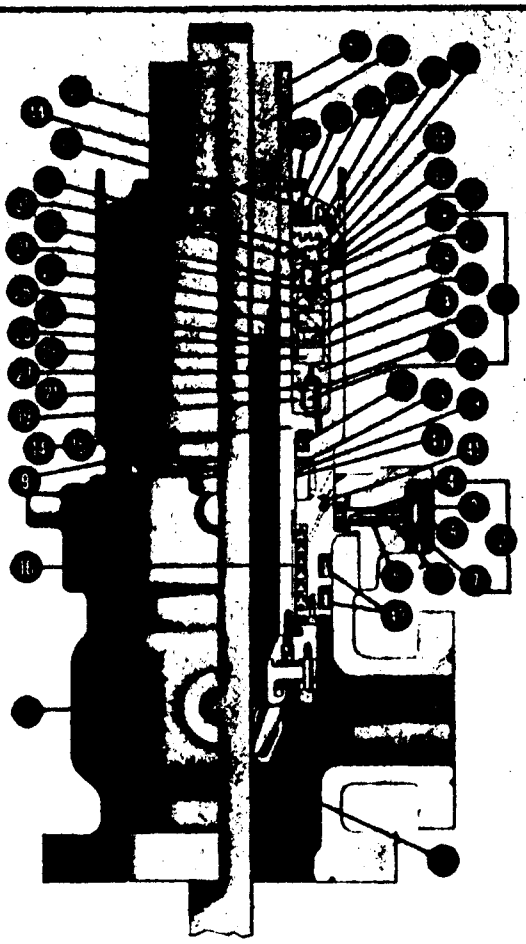
For domestic use, the following parts are recommended: An ample supply of Stripper Rubbers, Chevron Packing, automatic Body Seals and automatic Bearing Seals.

For export use, the parts ordered will depend upon usage and the length of time required to obtain them. Reference to the service manual covering installation, operation and maintenance.

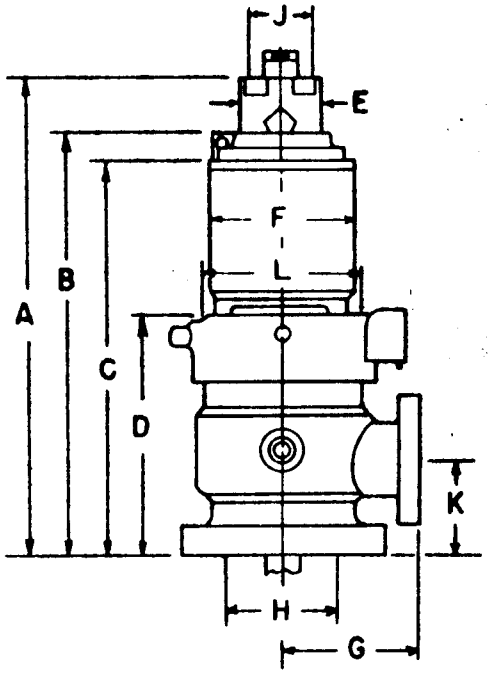
ROTATING BLOWOUT PREVENTERS

Size (In.)	Max. Service Pressure Rating (psi)	Approx. Weight (lbs.)	Dimensions (In.) A	D	G	H Body Bore	K	L Max. Dia. Housing
10	3000	2500	58½	30½	16	11	11⅛	17
12	3000	2650	58½	30½	16	13⅝	11⅛	17
16	2000	2750	58½	30½	19½	15¼	12⅛	17
20	2000	3400	58½	30½	22⁷⁄₁₆	20¼	13¼	23½

Dimensions shown in Columns G and K are for 6"-3000 PSI W.P. outlets on the 10" and 12" sizes and 8" 3000 PSI W.P. outlets on the 16" and 20" sizes. Other outlets can be furnished upon request



Type 50 Combination Rotating Blowout Preventer and Stripper



Dimensional Data Type 50 Combination Rotating Blowout Preventer and Stripper

UTAH OIL AND GAS CONSERVATION COMMISSION

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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13. STATE: Utah

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8. Posible productive zones will be open-hole tested. An induction electric log will be run.

(over)

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24.

SIGNED John S Gallates TITLE _____ DATE Aug 16 1978

(This space for Federal or State office use)

PERMIT NO. 43-019-30150 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Copy to 31

Instructions

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☆GPO 782-931

9. No abnormal temperatures, pressures, or potential hazards are expected.
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C. S. V. Oil Exploration Co.

2005 South 300 West - Salt Lake City, Utah 84115

MULTIPOINT SURFACE USE PLAN

FOR WELL FEDERAL 1-31

C.S.V. OIL EXPLORATION CO.

SAN ARROYO FIELD
Section 31, T16S, R26E
Grand County, Utah

1. Existing Roads

Please refer to the attatched copy of the BAR X WASH, UTAH-COLO, 7½ min., U.S.G.S. topographical sheet. The proposed well site is shown by an arrow and labeled as 1-31. The existing roads are shown in blue and black with new access road to the well site shown in red.

Access to the well from Utah may be made by turning off Interstate 70 at the Westwater interchange and then traveling 4 miles along the old Hiway 6 & 50 northeast to the junction of the Bar-X, Stateline graveled road. Proceed northwest along the Bar-X-Stateline road approx. 3.5 miles to the Utah-Colorado border then travel directly north along a dirt road next to the fence line along the Utah-Colorado boundary.

An alternate access may be made from Mack, Colorado by traveling north on the Baxter Pass Road to the junction of the San Arroyo-E. Bar-X gas field road. Proceed northwest along the San Arroyo-Bar-X road to the center of Sec. 19, T. 8 S., R104 W. and then turn directly west along a dirt road to the Utah-Colorado border.

Both graveled roads to the Bar-X-Stateline and E. Bar-X-San Arroyo gas fields are maintained by the County. They are well drained and easily passable by automobile. The rest of the roads may have to be maintained by C.S.V. Oil Exploration Co. by occasional grading.

2. Planned Access Roads

The planned access road to the well site is shown by a red dashed line on the attached topographic map. Its proposed width is twenty feet, including two side drainage ditches. Maximum grades on the proposed road should not exceed 5%, with most of the road much less than 5%. No turnouts, gates, cattleguards, or fence cuts will be necessary. The road surface will be the pre-existing subsoil. Some minor cut and fill may be necessary across drainages in the extreme SE¼SE¼ of Sec. 6, T17S, 26E as shown on the map. Also a cut and fill will be necessary across a dry wash in the extreme NW¼NW¼ of Sec. 6. A culvert may be necessary (18 to 20"). Stakes with red and green flagging have been established for the new proposed access road.

3. Location of Existing Wells

Two existing wells are shown on the enclosed map as blue dots. The #4 well in the SE¼SW¼ of Sec. 30, T16S, R26E, is a producing gas well in the San Arroyo field. The #10 well in the NE¼NE¼ of Sec. 32, T16S, R26E, is reported shut-in on the U.S.G.S. records; however, from field examination no well-head, marker, exists. It is assumed the well has been Plugged and Abandoned.

4. Location of Existing and/or Proposed Facilities

C.S.V. Oil Exploration Co. neither owns nor controls any existing facilities within a one-mile radius of the proposed well location. If the well is a productive gas well, production facilities will be immediate to the gas well; however, gas gathering lines and their location will have to be negotiated with Northwest Pipeline Corp.

If any areas are disturbed in the construction of flowlines and tank batteries which are not needed after construction is finished they will be rehabilitated in accordance with the guidelines given in Section 10 below.

5. Location and Type of Water Supply

The proposed will will be drilled with air. Any water needed during drilling and completion activities will be hauled by truck from Mack, Colorado.

6. Source of Construction Materials.

Any fill material needed in the construction of this location and access route will be redistributed from cuts made in this same construction.

7. Methods of Handling Waste Disposal

The dry well cuttings will be disposed of in a small unlined pit on location, as shown on the attached location layout. There will be no drilling fluid or produced water to dispose of as far as known. A portable toilet will be on location to dispose of human waste. Other waste material will be buried on location under at least two feet of cover. The location will be cleaned in accordance with schedule given in Section 10 below.

8. Ancillary Facilities.

There will be no camps, airstrips, or other ancillary facilities.

9. Well Site Layout.

Please refer to the attatched diagram.

10. Plans for Restoration of the Surface.

Within 20 days after the rig has been moved off the location, garbage and waste material will have been covered with at least two feet of fill material, the portable toilet will have been moved, and the cuttings pit will have been covered. If the well proves dry, the location and the access road will be recontoured and the stockpiled topsoil spread over them, within 30 days after the removal of the rig. The area will be reseeded when there is sufficient soil moisture to permit germination and growth of seed.

11. Other Information

The location is at the foot of the Book cliffs with drainage sloping to the south. The topography is somewhat hilly with numerous small "dry" drainage washes. A larger (8 to 10') drainage is located just west of the proposed location which will require some fill taken from higher ground to the east of the location. There is no topsoil and very little ground cover except for occaisional sagebrush. Cedar (Juniper) trees are the predominant vegetation. Important mammels include jackrabbit, cottontail, and chipmunks,

12. Lessee's Representative.

Jan E. Callister
2005 South 300 West
Salt Lake City, Utah 84115

Home Phone: 1-801-571-5890
Bus. Phone: 1-801-487-4721

CERTIFICATION

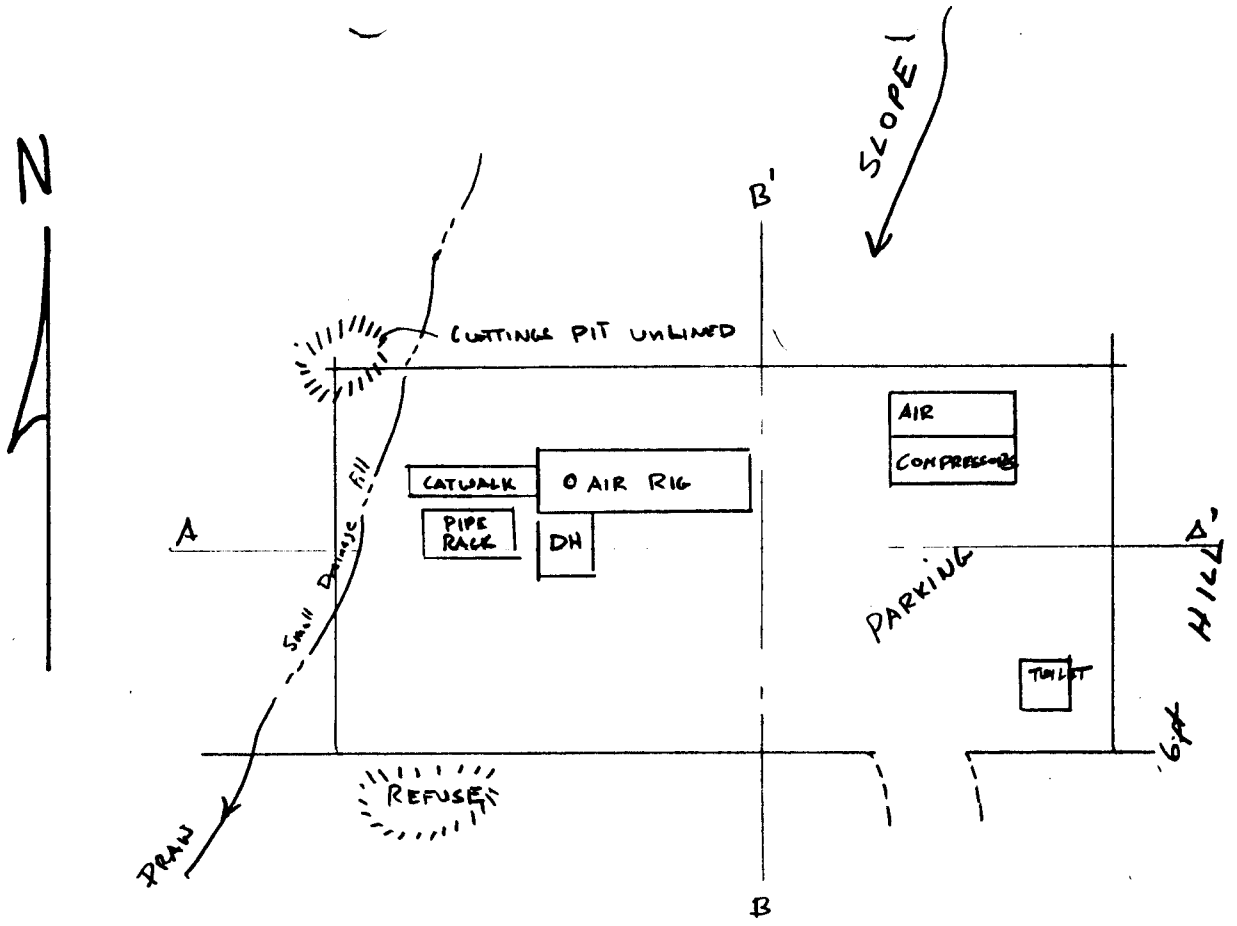
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by C.S.V. Oil Exploration Co. and its contractors in confirmity with this plan and the terms and conditions under which it is approved.

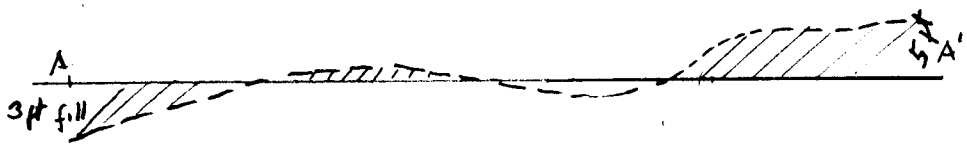
Aug 16 1978
Date

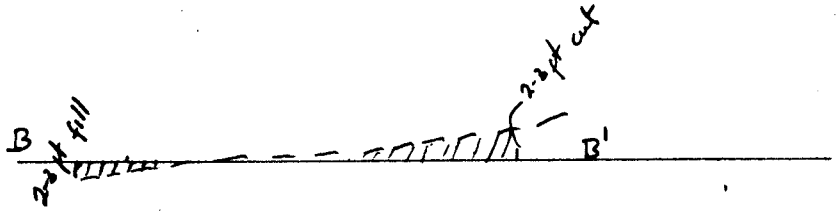
Name and Title

Resident birds are scrubjay, rock wren, and titmouse; there may be hawks and perhaps other larger birds higher in the cliffs. Lizards are the most common reptile.

The surface rights are owned by the Bureau of Land Management (public domain). There is no observed surface activity as far as man is concerned. There is no evidence of any water source in the area, except as rainfall. No archeological sites, historical sites or cultural sites are known to exist in the immediate area of the well location.

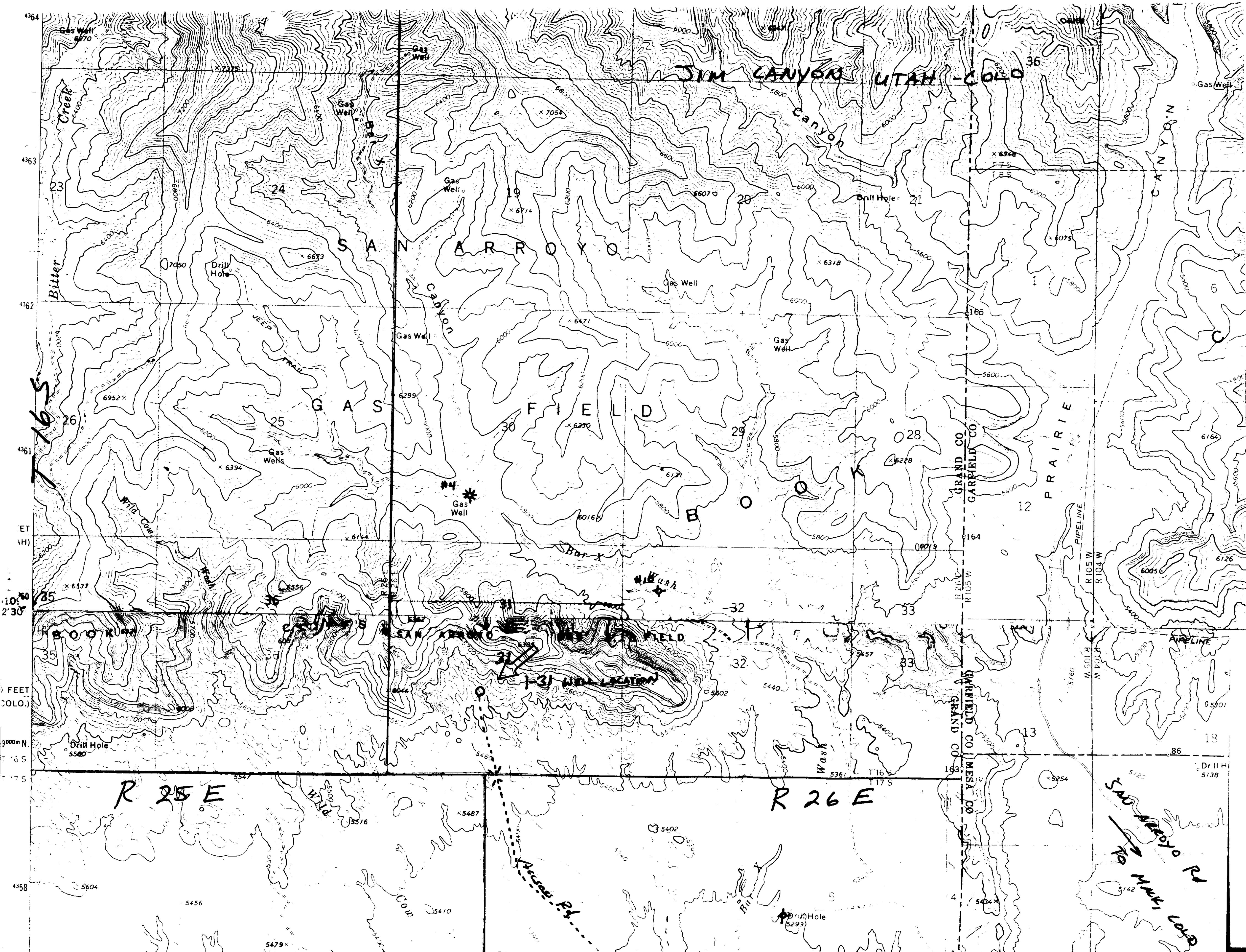


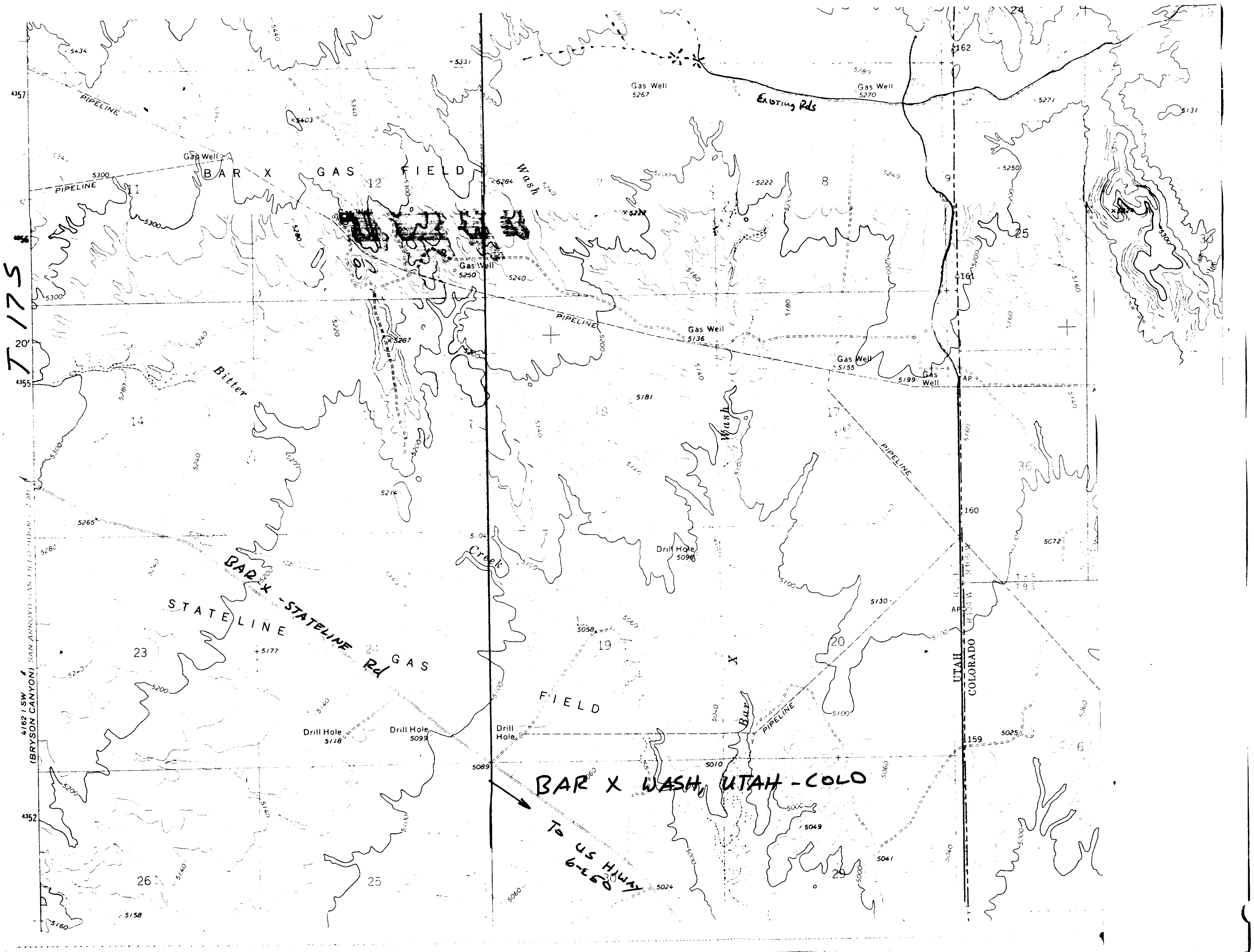




Exaggerated Vertical Scale

Approx. Scale
1" = 50 ft.


JIM CANYON UTAH-COLO
SAN ARROYO
GAS FIELD
BOOK
Canyon
Bitter Creek
Wild Cow Wash
Bar X Wash
JEEP TRAIL
Gas Well
Drill Hole
PRAIRIE
CANYON
PIPELINE
GRAND CO
GARFIELD CO
MESA CO
T 16 S
T 17 S
R 105 W
R 104 W
1-31 WELL LOCATION
Access Rd
R 25 E
R 26 E
SAN ARROYO Rd TO MACK, COLO


T 17 S
BAR X GAS FIELD
PIPELINE
Gas Well
Existing Rds
Wash
Bitter
Creek
Drill Hole
BAR X - STATELINE Rd
STATELINE GAS FIELD
Bar X
UTAH
COLORADO
BAR X WASH, UTAH - COLO
To US HIWAY 6-50
4162 I SW
(BRYSON CANYON)

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: Aug. 17

Operator: C&S Exploration

Well No: Fed. 1-31

Location: Sec. 31 T. 16S R. 26E County: Grand

File Prepared: [ ] Entered on N.I.D.: [ ]

Card Indexed: [ ] Completion Sheet: [ ]

API Number: 43-019-30459

CHECKED BY:

Administrative Assistant: [signature]

Remarks: OK - no other wells in Sec. 31

Petroleum Engineer: [signature]

Remarks:

Director: _____

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: [ ] Survey Plat Required: [ ]

Order No. _____ Surface Casing Change [ ]
to _____

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site [ ]

O.K. Rule C-3 [✓] O.K. In _____ Unit

Other:

[✓] Letter ~~Written/Approved~~

August 17, 1978

C.S.V. Exploration Co.
2005 South 300 West
Salt Lake City, Utah 84115

Re: Well No. Federal 1-31
Sec. 31, T. 16 S, R. 26 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30459.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

Oil and Gas Drilling EA No. 1346-78

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-22921

Operator C.S.V. Oil Exploration Co. Well No. 1-31 Federal

Location 1845' FSL 2026' FWL (NE¼SW¼) Sec. 31 T. 16S R. 26E

County Grand State Utah Field San Arroyo SLM

Status: Surface Ownership Federal Minerals Federal

Joint Field Inspection Date September 15, 1978

Participants and Organizations:

Gary Stephens	U.S. Geological Survey
Bob Kershaw	Bureau of Land Management
Jan Callister	C.S.V. Exploration Co.

Related Environmental Analyses and References:

(1) None.

(2)

Pad 150 x 200 area incl. pit
1.5 mi new access
1/4 mi upgrade
Flow line not incl
5 ac

Analysis Prepared by:
Gary Stephens
Environmental Scientist
Albuquerque

Date September 16, 1978

Analysis Reviewed by:
Lynn Rust
Environmental Scientist
Casper, Wyoming

noted George J Dmachak

Proposed Action:

On August 16, 1978, C.S.V. Oil Exploration Co. filed an Application for Permit to Drill the No. 1-31 Federal development well, a 4,350-foot oil and gas test of the Dakota and Mancos Formations of Cretaceous age, located at an elevation of 5,527 ft. in the NE¼SW¼ Section 31, T. 16 S., R. 26 E., SLM, Grand Co., Utah, on Federal mineral lands and Federal surface; Lease No. U-22921. There was no objection raised to the well-site nor to the access road. The operator was notified that fills and culverts would not be allowed along the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventer would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah, and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the Bureau of Land Management, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 200 ft. wide x 150 ft. long, and a cuttings pit. A new access road will be constructed 16 ft. wide x 1.5 mi. long and upgrade 16 ft. wide x ¼ mi. long access road from an existing and improved road. The operator proposes to construct production facilities on a disturbed area of the proposed drill pad. If production is established, plans for a gas flow line will be submitted to the appropriate agencies for approval. The anticipated starting date is November 15, 1978, and duration of drilling activities would be about 15 days.

Location and Natural Setting:

The proposed drillsite is approximately 17½ mi. Northwest of Mack, Colorado, the nearest town. A poor road runs to within 1½ mi. South of the location. This well is in the San Arroyo field.

Topography:

The site is located at the base of the Book Cliffs with the general topography consisting of rolling and dissected topography.

Geology:

The surface geology is Mancos shale. The soil is rocky loam. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs will be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels which might permit exposed upper formations to blowout or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah. The operator's drilling, cementing, casing, and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy loam to a rocky soil. The soil is subject to runoff from rainfall and has a high runoff potential, and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinon, juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 5 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, and reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location, however, the existing air quality relative to Federal Ambient Air Quality Standards is believed to be good. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rainfall should range from about 8 to 11 inches at the proposed location. The majority of the numerous drainages in the surrounding area are of a nonperennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8 inches.

Winds are weak/medium and steady, occurring predominantly from South to North. Air mass inversions are rare.

The climate is semiarid with abundant sunshine, hot summers and cold winters, with temperature variations on a daily and seasonal basis.

Surface-Water Hydrology:

None, located near top of alluvial wash fan.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface-water systems.

The potentials for pollution would be present from leaks or spills. The operator is required to report and clean up all spills or leaks.

Ground-Water Hydrology:

Some minor pollution of ground-water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination, and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basis information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B.

The depths of fresh-water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh-water aquifers. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Juniper, sagebrush, snakeweed, wheatgrass, and greasewood.

Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about five acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

Animal and plant inventory has been made by the Bureau of Land Management. No endangered or threatened plants or animals are known to habitat on the project area. The fauna of the area consists predominantly of mule deer, coyotes, foxes, rabbits, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If an historic artifact, an archaeological feature or site is discovered during construction operations, activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings and other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and are judged to be minor. All permanent facilities placed on the location would be earthtoned to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to predrilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are somewhat significant in Grand County, Utah. But should this well discover a significant new hydrocarbon source, local, State, and possibly National economies might be improved. In this instance, other development wells would be anticipated with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and U.S. Geological Survey's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

Land Use:

Other; accessible to only four wheel drive vehicles.

There are no National, State, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails, or other formally designated recreational facilities near the proposed location.

Waste Disposal:

The mud and reserve pits would contain all fluids used during the operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternatives to the Proposed Action:

(1) Not approving the proposed permit -- The oil and gas lease grants the Lessee exclusive right to drill for, mine, extract, remove, and dispose of all oil and gas deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under the U.S. Geological Survey and other controlling agencies' supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

(2) Minor relocation of the wellsite access road or any special restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal, or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately ~~two~~ 5 acres of land surface from the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and lifestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil, or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for subsurface

damage to fresh-water aquifers and other geologic formations exists. Minor distractions from aethestics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable committment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to the river would exist through leaks and spills.

Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Section 102(2)(C).

10/4/78
Date

District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

STIPULATIONS FOR CSV WELL #1-31 TEMPORARY ROAD RIGHT-OF-WAY

1. Road will be 16 feet wide (drivable surface) with turn-outs.

2. All cut banks will be sloped a minimum of 2:1.

3. All wash crossing will be low water crossings.

4. If production is obtained from the well a long term right-of-way on the road will be applied for and the road will be upgraded to BLM specifications for long term roads (Crowning, ditching, water barring, etc.).

5. On abandonment the access road will be restored as follows:

   a. Road will be contoured into the surrounding terrain.

   b. After the route is contoured the entire disturbed area will be ripped to a depth of 18".

   c. Water bars, drainages, ditches etc. will be installed as directed by the Grand Resource Area Manager.

   d. The road will be reseeded using the following seed mixture in the fall (Oct. 15-Dec. 15) of the year of abandonment.

SEEDING MIXTURE

SPECIES		RATE
Grassess		lb/acre
Oryzopsis hymenoides	Indian Rice Grass	1
Argopyron desertorum (standard)	Crested Wheatgrass	1
Sporobolus cryptandrus	Sand Drop Seed	1
Forbs		
Sphaeralcea ambigua	Globe Mallow	1
Helianthus annus	Wild Sunflower	1
Shrubs		
Atriplex canescans	Four Wing Saltbush	1
Atriplex confertifolia	Shadscale	1
Eurotia lanata	Winterfat	1
		8

Seed will be broadcast and harrowed into the soil.

RECLAMATION PROCEDURES IN GRAND RESOURCE AREA

1. Disk or rip pads and access roads.
   a. Overlap passes in order to insure complete treatment.

2. Contour pads and access roads.
   a. Lay beams into centers.

   b. Use cut material for fill areas.

   c. Lay stockpiled surface soil over top of pads and spread evenly.

   d. On highly erossive soils, it may be more beneficial to grade slopes to reduce steepness.

   e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.

   f. Keep machinery runs over fill slopes at a minimum.

3. Water bar roads where required by this office.

* 2%	Grade	-	200 ft. intervals
2-4%	Grade	-	100 ft. intervals
4-5%	Grade	-	75 ft. intervals
>5%	Grade	-	50 ft. intervals

   * Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.

4. Seed roads and pads in the fall (Oct.-through Nov.)
   a. Use a rangeland drill or a drill of similar heavy construction in rough areas where agriculture drills are not suitable.

   b. In highly critical areas where soils are heavy and precipitation is low it will be necessary to mulch with hay or straw at a rate of 1 to 1.5 tons per acre. Fifty percent of hay mulches by weight should be 10 inches or longer in length.

OM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

: DISTRICT ENGINEER, , SALT LAKE CITY, UTAH

BJECT: APD MINERAL EVALUATION REPORT LEASE NO. U-22921

ERATOR: C.S.V. Oil Exploration Co. WELL NO. 1-31

CATION: ¼ NE ¼ SW ¼ sec. 31, T. 11S, R. 21E, SLM

Grand County, Utah

Stratigraphy: Operator picked tops seem reasonable.

Fresh Water: May occur in sands of Mancos Shale.

Leasable Minerals: Within lands designated valuable prospectively for coal. Coal may be encountered in Dakota fm.

Additional Logs Needed: None Run induction electric log thru Dakota to identify coal.

Potential Geologic Hazards: None anticipated by operator

References and Remarks: Within San Arroyo KGS

gnature: Candace C. Clark Date: 9-19-78

United States Department of the Interior

IN REPLY REFER TO
3100
U-22921
(U-603)

BUREAU OF LAND MANAGEMENT
Moab District
Grand Resource Area
P.O. Box M
Moab, Utah 84532

September 26, 1978

Mr. Ed Guynn, District Engineer
USGS Conservation Division
8440 Federal Building
Salt Lake City, UT 84138

SUBJECT LOCATION: C.S.V. Oil Exploration Co.
Federal 1-31 Well, Lease U-22921
T. 16 S., R. 26 E., SLBM
Section 31, NE¼SW¼
Grand County, Utah

Dear Mr. Guynn:

On September 15, 1978, a representative from this office met with Gary Stephens, USGS, and Jan E. Callister, agent of the C.S.V. Oil Exploration Co. for an inspection of the above referenced location. Subject to the following conditions, I am approving the surface management portion of the Application for Permit to Drill.

Conditions:

1. An archaeological clearance must be obtained.
2. Contact this office at least 24 hours prior to beginning construction of access road and pad.
3. Stockpile the surface 12" of topsoil in a wind-row, on the northeast side of the location.
4. If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil & Gas" pamphlet (Joint BLM & USGS publication).
5. No culverts will be used. Lowwater crossings will be constructed through washes.
6. No fill material will be pushed into the wash on the west side of the location.

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

7. If production is obtained, all production facilities will be painted "desert gold" or a similar color approved by the Grand Resource Area Manager.

8. The trash pit will be fenced with chicken wire during drilling operations and be at least six foot deep.

9. The "blooey" line will be centered and directed into the pit.

10. The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

11. Rehabilitation of the site ~~and access road will be accomplished~~ in accordance with the enclosed restoration procedures. (Include copy of stips for CSU #1-31 + seed sources)

12. Notify the BLM District Archaeologist if cultural material from subsurface deposits is exposed during the operation.

Please forward the enclosed information to C.S.V. Oil Exploration Company.

Sincerely yours,

Acting

C. Delano Backus
Area Manager

Enclosures: (4)
1-Seeding Mixture
2-Seed Sources
3-Reclamation Procedures
4-Surface Use Standards

SEED SOURCES

Arkansas Valley Seed Co.
Attn: Robert Appleman
3131 E. Alameda, Apt. 2104
Denver, Colorado 80209

Arkansas Valley Seeds, Inc.
Box 270
Rocky Ford, CO 81067

Beaver Enterprises
3416 Tamarack
Boise, ID 83702

Berger & Plate Co.
P. O. Box 7697
San Francisco, CA 94120

Carhart, Ross O.
Dove Creek, Colo. 81324

Cenex Seed Co.
P. O. Box 1748
Billings, MT 59103

Christensen, Art
Box 186
Dillon, MT 59725

Curtis and Curtis, Inc.
Star Route, Box 8A
Clovis, New Mexico

Robert Dye Seed Ranch, Inc.
Pomerdy, WA 99347

Eiseman Seed Co.
Box 277
Fairfield, MT 59436

Etheridge, Paul H.
Star St., Box 235B
Powell, WY 82435

Emac Seed Co.
Rt. 1, Box 850
Willcox, AZ 85643

Globe Seed & Feed Co., Inc.
Box 445
Twin Falls, ID 83301

Boyd E. Globe & Sons
Gunnison, Utah 84634

The Gooding Seed Co.
Box 57
Gooding, ID 83330

Dick Haynes, Farmterials, Inc.
Baker, OR 97814

McFarland Trading Co.
P. O. Box 68
Hubbard, OR 97032

Mallery, D. B.
1506 NE Northview
Bend, OR 97701

Mile High Seed Co.
Box 1988
Grand Junction, CO 81501

Montana Seeds, Inc.
Rt. 3
Conrad MT 59425

Coos Grange Supply
1085 S. Second St.
Coos Bay, OR 97420

Nomad Alfalfa, Inc.
P. O. Box 217
Forest Grove, OR 97116

Northplan Seed Products
P. O. Box 9107

Northrup King & Co.
P. O. Box 192
Longmont, CO 80501

Northrup King & Co.
Box 7746
Boise, ID 83707

Sharp Bros. Seed Co.
P. O. Box 11
Healy, KS 67850

Sharp Bros. Seed Co.
4378 Canyon Dr.
Amarillio, TX 79109

Vic's Enterprises
319 McKinley
Rawlins, WY 82301

Rocky Mountain
Landscaping & Sprinkler
P. O. Box 624
Ogden, UT 84401

S & S Seed
382 Arboleda Rd.
Santa Barbara, CA 93110

Steven Bros.
P. O. Box 496
Ephraim, UT 84627

CLYDE ROBIN SEED COMPANY, INC.
Mr. Steven R. Atwood, V.P.
P.O. Box 2091
Castro Valley, CA 94546

LONGMONT SEED COMPANY
51 Brown Street
P.O. Box 923
Longmont, CO 80501

GLOBE SEED & FEED COMPANY
Mr. L.H. Haslam
Truck Lane
TwinFalls, Idaho

E. C. MORAN
Stanford, Montana 59479

JACKLIN SEED CO. (Division of The Vaughan-Jacklin Corp.)
Mr. John Thorne, Ph.D., Research Director
(509-926-6241)
E8803 Sprague Ave.
Spokane, WA 99206

HORSELY-CUMMINGS SEED CO.
Mr. Dave Cummings
(801-723-5246)
P.O. Box H
Brigham City, Utah 84302

Gary Jorgenson
Ephraim, UT 84627

John Plummer
Ephraim, UT 84627

Roger Stewart
Ephraim, UT 84627

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

May 25, 1979

C.S.V. Exploration Company
2005 South 300 West
Salt Lake City, Utah 84115

Re: Well No. Federal 1-31
Sec. 31, T. 16S, R. 26E
Grand County, Utah

Gentlemen:

In reference to the above mentioned well, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill this well, please notify this Division. If spudding or any other activity has taken place, please send necessary forms.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Kathy Avila

KATHY AVILA
RECORDS CLERK

C. S. V. Oil Exploration Co.
2005 South 300 West - Salt Lake City, Utah 84115

June 6, 1979

Location Abandoned
6-6-79

Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Fed. 1-31
Sec. 31, T16S, R26E
Grand County, Utah

Attention: Kathy Avila

Dear Ms. Avila:

In response to your letter dated May 25, 1979 concerning the above referenced well, the 1-31 well has not been spudded.

Federal Oil & Gas Lease U-22921, on which the proposed well was located, had an expiration date of November 30, 1978. Steps were taken by C.S.V. Oil Exploration Co. to try and spud the well prior to the expiration date, however, a Federal Permit to Drill the well was not issued on time. Evidently the B.L.M. because of a heavy work load was unable to process a Temporary Road Right-of-Way application that was submitted on September 5, 1978. Because of this and a technical problem on a rental payment made in 1975, C.S.V has submitted an Appeal to the Department of the Interior. We are presently waiting on a decision concerning the lease.

In view of the above, C.S.V. will submit a new Application to Drill if a decision from the Interior Board of Land Appeals is in our favor.

Sincerely,

C.S.V. OIL EXPLORATION CO.

Jan E. Callister

RECEIVED
JUN 7 1979

P.M. Oil
487-4
149-31

C. S. V. Oil Exploration Co.

2005 South 300 West - Salt Lake City, Utah 84115

July 8, 1980

Utah Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: C.S.V. 1-31 Federal
Sec. 31, T. 16 S, R 26 E,
San Arroyo Field
Grand County, Utah

Gentlemen:

Please find enclosed re-application forms for your approval to drill the above captioned well.

On August 17, 1978, approval was granted from your office to drill the referred well and an API number (43-019-30459) was assigned. However, because of problems with the Bureau of Land Management, C.S.V. Oil Exploration Co. was not allowed to drill the well at that time. These problems have now been overcome, and it is the desire of the U. S. Geological Survey that the well be drilled as soon as possible.

Sincerely yours,

C.S.V. OIL EXPLORATION CO.

Jan E. Callister

RECEIVED
JUL 10 1980
DIVISION OF
OIL, GAS & MINING

To close to Texas Pacific St. #1
36-16S-25E (3914')

Form OGC-1a

SUBMIT IN ~~TRIPLICATE~~* (Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. Lease Designation and Serial No.: U-22921

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. If Indian, Allottee or Tribe Name:

1a. Type of Work: DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

7. Unit Agreement Name:

b. Type of Well: Oil Well [ ] Gas Well [X] Other — Single Zone [ ] Multiple Zone [ ]

8. Farm or Lease Name: C.S.V. - Federal

2. Name of Operator: C.S.V. Oil Exploration Co.

9. Well No.: 1-31

3. Address of Operator: 2005 South 300 West, Salt Lake City, Utah 84115

10. Field and Pool, or Wildcat: ~~San Arroyo~~ Undesignated

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 1,845' FSL; 2,026' FWL, Sec. 31 NE SW

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 31, T16S, R26E, SLM.

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*: Approx. 17½ miles northwest of Mack, Colorado

12. County or Parrish: Grand 13. State: Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any): 525'

16. No. of acres in lease: 320

17. No. of acres assigned to this well: 320

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.: 4,515'

19. Proposed depth: 4,200'

20. Rotary or cable tools: Rotary

21. Elevations (Show whether DF, RT, GR, etc.): 5,526.5' GR

22. Approx. date work will start*: August 1, 1980

RECEIVED
JUL 10 1980
DIVISION OF
OIL, GAS & MINING

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
11"	8-5/8"	20#	450' ft.	225 sks Cement to surface
7-7/8"	4½	10.5#	To production	

1. The above well will be spudded in the Mancos Shale.
2. Estimated Geologic Fm. tops: Dakota Silt 3,666'; Dakota sd. 3734'; Morrison 3854'.
3. Oil may be found in the lower Mancos Shale; prime objective is for gas in the Dakota and possibly in the Morrison Fm.
4. About 300 ft. of 8-5/8" surface pipe will be set and cemented to shut off any surface water.
5. Pressuere Control Device: See attatched diagram.
6. Air will be used as the circulating media.
7. It is proposed that a float valve will be run in the bottom drill collar. A drill string float valve and a kelly hose shut-off valve will be used.
8. Possible productive zones will be open-hole tested. The following electricl logs will be run: Induction electric; Comp. Fm. Density; Sidewall Neutron proosity log.
9. No abnormal temperature, pressures, or potential hazards are expected.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed: [signature] Title: Cons. & Sec. Date: July 8, 1980

(This space for Federal or State office use)

Permit No. 43-019-30459 Approval Date:

Approved by: Title: Date:

Conditions of approval, if any:

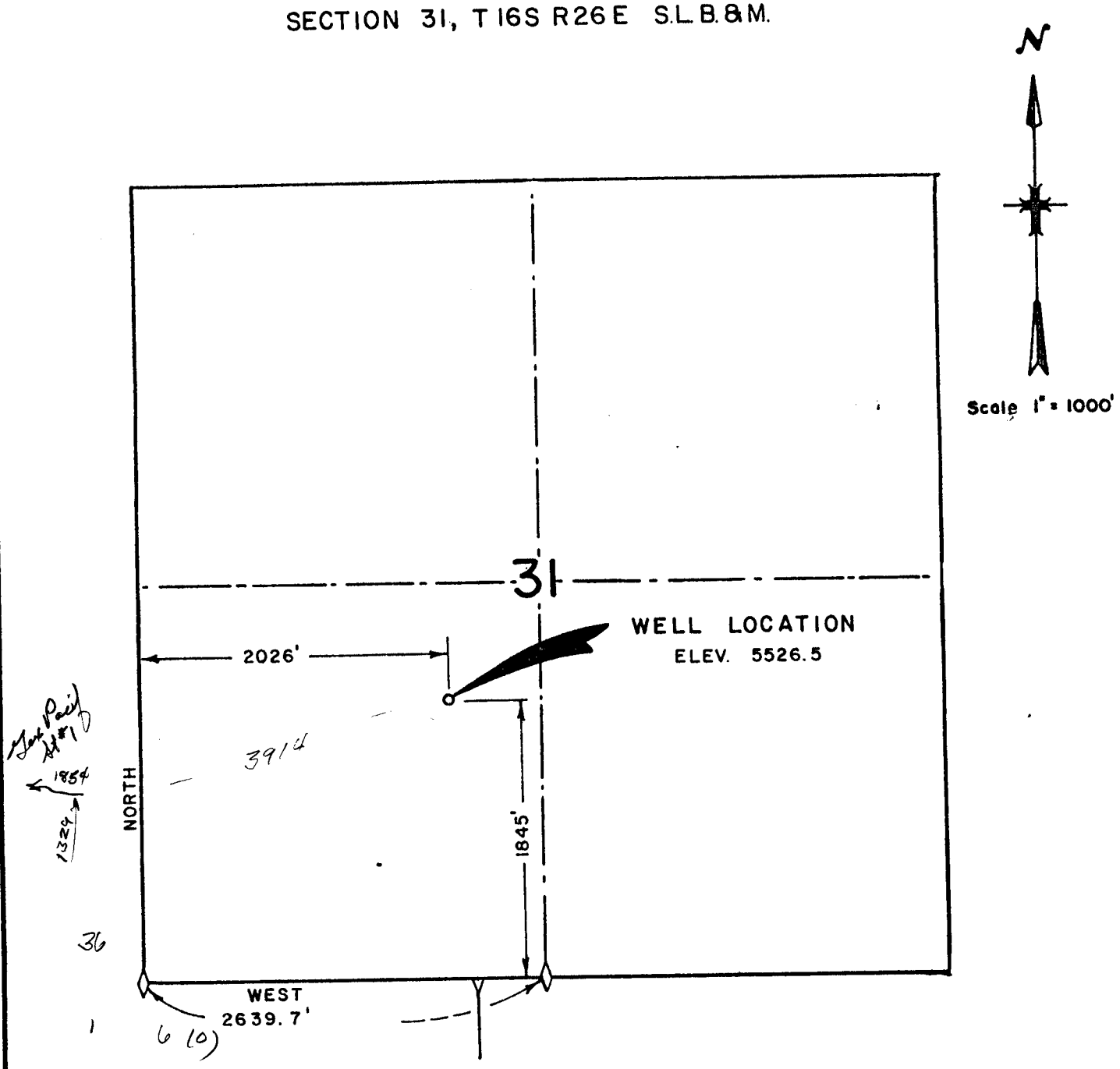
APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 9-26-80
BY: M. J. Minder

*See Instructions On Reverse Side

WELL LOCATION

1845.0 FT. N.S.L. — 2026.0 FT. E.W.L.

SECTION 31, T 16S R26E S.L.B.&M.



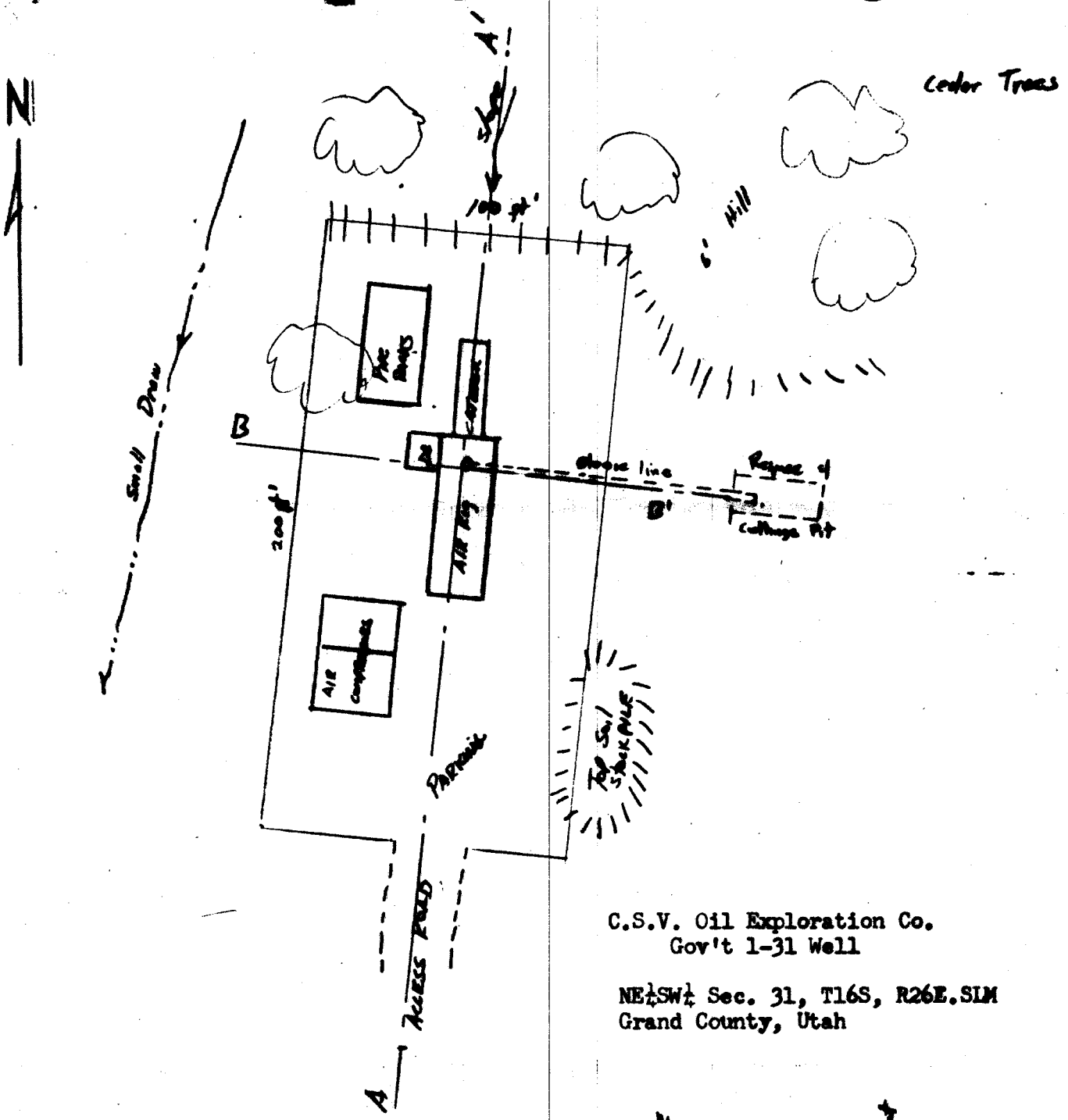
I, David L. Bear do hereby certify that this plat was plotted from notes of a field survey made under my direct responsibility, supervision and checking on August 4, 1978.

David L. Bear
Registered Land Surveyor

WESTERN ENGINEERS, INC.
WELL LOCATION
C.S.V. OIL EXPLORATION CO.
C.S.V. 1-31 GOV'T.
GRAND COUNTY, UTAH
SURVEYED D.L.B. DRAWN G.L.A.
GRAND JUNCTION, COLO. 8/7/78

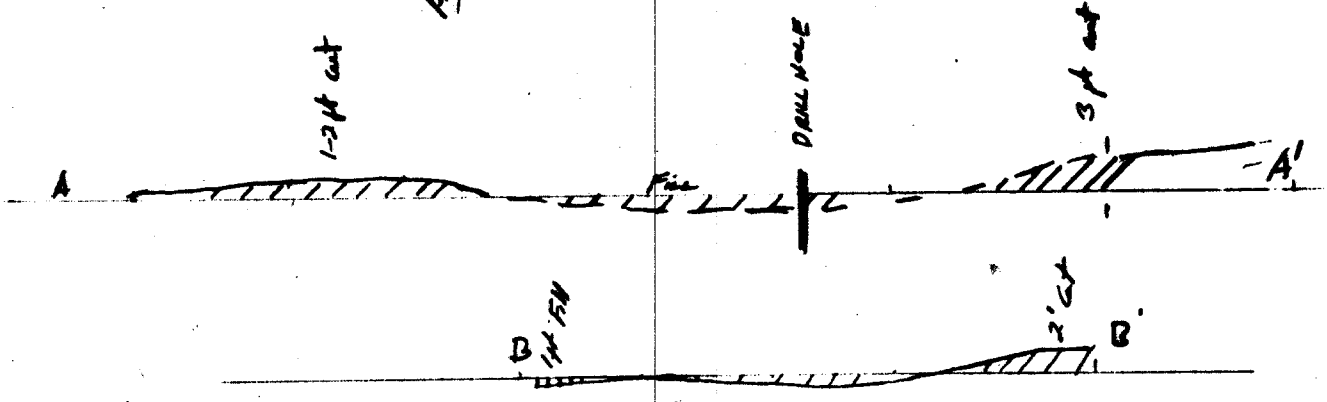
1922

REVISED SITE PLAN FOR DRILLING TOOLS



C.S.V. Oil Exploration Co.
Gov't 1-31 Well

NE¼SW¼ Sec. 31, T16S, R26E.SLM
Grand County, Utah



Approx Scale 1" = 50ft

** FILE NOTATIONS **

DATE: 10/8/80

OPERATOR: C.S.V. Exploration

WELL NO: Fed. 1-31

Location: Sec. 31 T. 16S R. 26E County: GRAND

File Prepared: ☐ Entered on N.I.D: ☐

Card Indexed: ☐ Completion Sheet: ☐

API Number 43-019-30459

CHECKED BY:

Petroleum Engineer: M.J. Minder 9-26-80

Director:

Administrative Aide:

APPROVAL LETTER:

Bond Required: ☐ Survey Plat Required: ☐

Order No. 165-6 9/26/80 O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation ☐ Plotted on Map ☑

Approval Letter Written ☑

Hot Line ☑ P.I. ☑

October 17, 1980

C.S.V. Oil Exploration Co.
2005 South 300 West
Salt Lake City, Utah

Re: Well NB. Federal 31-1
Sec. 31, T. 16S, R. 26E
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with the Order issued in Cause No. 165-6 dated September 26, 1980.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43- 019-30459.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Michael T. Minder,
Petroleum Engineer

/ka
cc: USGS

C. S. V. Oil Exploration Co.

2005 South 300 West - Salt Lake City, Utah 84115

November 7, 1980

Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: STATUS REPORT
Well No. Fed. 1-31
Sec. 31, T16S, R26E
San: Arroyo
Grand County, Utah

The above referenced well was spudded at 4:15 am, October 28, 1980. Three hundred fifty feet of 8-5/8" surface casing was set and cemented with 200 sks cement. Reached TD of 4,058 ft. on November 3, 1980. Encountered a fair show of gas in the Dakota Fm. Gas only flaring 20-30 seconds after each connection and then dying. Operations shut down for further evaluation.

C.S.V. OIL EXPLORATION CO.

Jan E. Callister

Form OGC-1b

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.: U-22921

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: C.S.V. Oil Exploration Co.

8. FARM OR LEASE NAME: C.S.V.

3. ADDRESS OF OPERATOR: 2005 South 300 West, Salt Lake City, Utah 84115

9. WELL NO.: C.S.V.-Fed. 1-31

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1,845 ft. FSL; 2,026' ft FWL Sec. 31

10. FIELD AND POOL, OR WILDCAT: San Arroyo (undesignated)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 31 T16S, R26E SLM

14. PERMIT NO.: 43-019-30459

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5,537 GR ✗ 5,534 KB

12. COUNTY OR PARISH: Grand

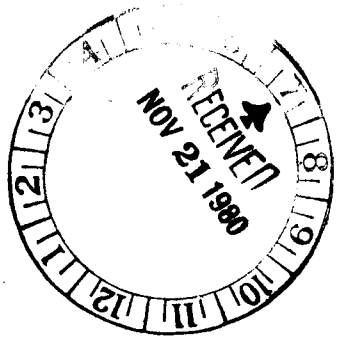
13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Status			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The above well was spudded October 28, 1980. A 12¼" surface hole was drilled to a TD of 380ft. A string of 8-5/8", 24#, surface pipe was cemented with 200 sks cement. A 7-7/8" hole was drilled to a T.D. of 4,058. Reached TD on November 3, 1980. A fair show of gas was found in the Dakota Fm. flairing on connections then dying after 20-30 seconds. A production string of 4½" casing was run a cemented. Waiting on data evaluation and completion rig.



18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE _____ DATE Nov. 19, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UTAH DEPT. OF NATURAL RESOURCES

Form 9-330
(Rev. 5-63)

~~UNITED STATES~~
~~DEPARTMENT OF THE INTERIOR~~
GEOLOGICAL SURVEY

SUBMIT IN DUPLIC. (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-22923

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: C.S.V. - Federal

9. WELL NO.: C.S.V. 1-31 Gov't

10. FIELD AND POOL, OR WILDCAT: San Arroyo (undesignated)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 31, T16S, R26E, SLM

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: C.S.V. Oil Exploration Co.

3. ADDRESS OF OPERATOR: 2005 South 300 West, Salt Lake City, Utah 84115

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1,845 ft. FSL; 2,026 ft. FWL, Sec. 31
At top prod. interval reported below
At total depth

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-019-30459	Oct. 20, 1980	Grand	Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-28-80	10-3-80	2-8-81	5,527' GR, 5,5[illegible]	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	CABLE TOOLS
4,058 ft.			Surface - TD	

RECEIVED
MAR 24 1981
DIVISION OF OIL, GAS & MINING

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 3,792 - 3,859 ft. Dakota

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Schlumber DI-GR, CFD, SNPL.

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	371.4	12-1/4	200 sks	
4-1/2"	10.5#	4,058	7-7/8	130 sks	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	3,753 KB	

31. PERFORATION RECORD (*Interval, size and number*)
3,850; 3,854; 3,858' 1 shot each .30"
3,792-3,804' 7 shots

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3,792-3,859'	Acidized 750 gal. 7½ MSR
	Frac. 72,000# snd
	46,000 gal foam.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
		Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5-8-81	4hrs 15 min	1/2"			190		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
190#	860 SI			1,141	None	

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Vented

TEST WITNESSED BY: Gleason Eng.

35. LIST OF ATTACHMENTS: 1 set Electric logs; 1 set drilling and completion summaries.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Geol. DATE March 23, 1981

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Mancos shale	Surface	
Dakota silts	3,670'	
Dakota Sndl.	3,739'	
Morrison	3,910'	

*GPO 782-929

D

56 64 03

FILE IN TRIPLICATE
FORM OGC-8-X

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

MAR 24 1981

DIVISION OF
OIL, GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number CSV. 1-31 GOV 4

Operator CSV. OIL EXPLORATION CO Address 2005 So 300 West SLC, UTAH 84115

Contractor TWIN ARROW Address Rangely, Colorado

Location NE ¼ SW ¼ Sec. 31 T: 16 S R. 26 E County GRAND

Water Sands

	Depth		Volume	Quality
	From	To	Flow Rate or Head	Fresh or Salty
1.	No water Sands encountered.			
2.				
3.				
4.				
5.				

(Continue of reverse side if necessary)

Formation Tops

mancos sh.	Surface
Dakota slts	3,670'
Dakota Snd	3,739'
Morrison	3,910'

Remarks

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.